



TRANSPORTATION CABINET

Frankfort, Kentucky 40622
www.transportation.ky.gov/

Steven L. Beshear
Governor

Michael W. Hancock, P.E.
Acting Secretary

February 24, 2010

Kentucky Division of Water
ATTN: Jesse Robinson
200 Fair Oaks
Frankfort, Kentucky 40601

SUBJECT: Request for Water Quality Certification
KY 7 Rockfall Mitigation @ Fusonia
Perry County, Item No. 10-5005.00

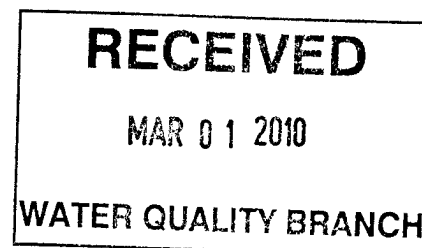
Dear Mr. Robinson:

Submitted is a request for Water Quality Certification (WQC). The WQC application involves rockfall mitigation along KY state route 7 in Perry County. The area is prone to rockslides and often experiences falling rock onto the roadway. The excavated rock will be used to stabilize the left bank of the North Fork Kentucky River which is actively eroding and jeopardizing the stability of the roadway. All remaining excavated rock will be permanently stored in a proposed excess material site. For any stream impacts requiring mitigation, the KYTC proposes in-lieu fees (ILF) paid to the Kentucky Department of Fish and Wildlife Resources.

Enclosed is a WQC application for your review. If you have any questions or need additional information, please contact me at (502) 564-7250 or by email at: ronb.rigneyii@ky.gov.

Sincerely,

Ronald B. Rigney, II
Division of Environmental Analysis
Kentucky Transportation Cabinet



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**COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES & ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER**

**APPLICATION FOR PERMIT TO CONSTRUCT ACROSS OR ALONG A STREAM
AND / OR WATER QUALITY CERTIFICATION**

Chapter 151 of the Kentucky Revised Statutes requires approval from the Division of Water prior to any construction or other activity in or along a stream that could in any way obstruct flood flows or adversely impact water quality. *If the project involves work in a stream, such as bank stabilization, dredging or relocation, you will also need to obtain a 401 Water Quality Certification (WQC) from the Division of Water.* This completed form will be forwarded to the Water Quality Branch for WQC processing. The project may not start until all necessary approvals are received from the KDOW. For questions concerning the WQC process, contact the WQC section at 502/564-3410.

If the project will disturb more than 1 acre of soil, you will also need to complete the attached Notice of Intent for Storm Water Discharges, and return both forms to the Floodplain management Section of the KDOW. This general permit will require you to create an implement an erosion control plan for the project.

1. OWNER: _____ Kentucky Transportation Cabinet

MAILING ADDRESS: _____ 200 Mero Street Frankfort, KY 40622

TELEPHONE #: _____ 502-564-7250 _____ EMAIL: ronb.rigneyii@ky.gov

2. AGENT: _____ Ronald B. Rigney, II

ADDRESS: _____ 200 Mero Street Frankfort, KY 40622

TELEPHONE #: _____ 502-654-7250 _____ EMAIL: ronb.rigneyii@ky.gov

3. ENGINEER: _____ N/A _____ P.E. NUMBER: N/A

4. DESCRIPTION OF CONSTRUCTION: _____ KY 7 Rockfall Mitigation @ Fusonia _____

5. COUNTY: _____ Perry _____ NEAREST COMMUNITY: _____ Fusonia _____

6. USGS QUAD NAME _____ Vicco _____ LATITUDE/LONGITUDE: 37.158389/-83.087772

7. STREAM NAME: _____ North Fork KY River and unnamed tributaries WATERSHED SIZE (in acres): 328 square miles, 175 acres, <50 acres _____

8. LINEAR FEET OF STREAM IMPACTED: Perennial=288, Intermittent=789, Ephemeral=85 _____

9. DIRECTIONS TO SITE: _____ From Hazard, take KY 15 to KY 7. Fusonia is approximately 7 miles on KY 7. _____

RECEIVED

MAR 01 2010

WATER QUALITY BRANCH

10. IS ANY PORTION OF THE REQUESTED PROJECT NOW COMPLETE? Yes ☒ No If yes, identify the completed portion on the drawings you submit and indicate the date activity was completed. DATE: _____
11. ESTIMATED BEGIN CONSTRUCTION DATE: Summer 2010
12. ESTIMATED END CONSTRUCTION DATE: Summer 2012
13. HAS A PERMIT BEEN RECEIVED FROM THE US ARMY, CORPS of ENGINEERS? Yes ☒ No If yes, attach a copy of that permit.
14. THE APPLICANT *MUST* ADDRESS PUBLIC NOTICE:
- (a) PUBLIC NOTICE HAS BEEN GIVEN FOR THIS PROPOSAL BY THE FOLLOWING MEANS:
- _____ Public notice in newspaper having greatest circulation in area (provide newspaper clipping or affidavit)
- _____ Adjacent property owner(s) affidavits (Contact Division of Water for requirements.)
- (b) _____ I REQUEST WAIVER OF PUBLIC NOTICE BECAUSE:
- _____
- _____ Contact Division of Water for requirements.
15. I HAVE CONTACTED THE FOLLOWING CITY OR COUNTY OFFICIALS CONCERNING THIS PROJECT:
- _____
- _____ Give name and title of person(s) contacted and provide copy of any approval city or county may have issued.
- _____
16. LIST OF ATTACHMENTS: _____ Section 404/410 application is attached.
- _____
- _____ List plans, profiles, or other drawings and data submitted. Attach a copy of a 7.5 minute USGS topographic map clearly showing the project location.
- _____
17. I, _____ (owner) CERTIFY THAT THE OWNER OWNS OR HAS EASEMENT RIGHTS ON ALL PROPERTY ON WHICH THIS PROJECT WILL BE LOCATED OR ON WHICH RELATED CONSTRUCTION WILL OCCUR (for dams, this includes the area that would be impounded during the design flood).
18. REMARKS: _____

I hereby request approval for construction across or along a stream as described in this application and any accompanying documents. To the best of my knowledge, all the information provided is true and correct.

SIGNATURE: _____

Owner or Agent sign here. (If signed by Agent, a Power of Attorney should be attached.)

DATE: 2/22/2010

SIGNATURE OF LOCAL FLOODPLAIN COORDINATOR: _____

Permit application will be returned to applicant if not properly endorsed by the local floodplain coordinator.

DATE: _____

SUBMIT APPLICATION AND ATTACHMENTS TO:

Floodplain Management Section
Division of Water
14 Reilly Road

ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): 02/19/2010

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:
Kentucky Transportation Cabinet, 200 Mero St. Frankfort, KY 40622 – Ronald Rigney II

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: Louisville District, KY – KY 7 Rockfall Mitigation @ Fusonia, Perry County, KYTC #10-5005

**D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)**

State: KY County/parish/borough: Perry City: Fusonia
Center coordinates of site (lat/long in degree decimal format): Lat. 37.158389°
Pick List, Long. -83.087772° **Pick List**.

Universal Transverse Mercator:

Name of nearest waterbody: North Fork KY River

Identify (estimate) amount of waters in the review area:

Non-wetland waters: 1162 linear feet: various width (ft) and/or 0.15 acres.

Cowardin Class: Riverine

Stream Flow: Perennial (288 ft) Intermittent (789 ft) Ephemeral (85 ft)

Wetlands: 0 acres.

Cowardin Class:

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal:

Non-Tidal:

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination. Date: 02/19/2010

☒ Field Determination. Date(s): 01/14/2010

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to

request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable. This preliminary JD finds that there "*may be*" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

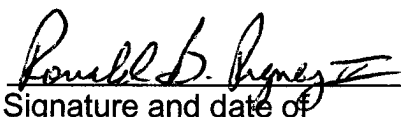
SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply

- checked items should be included in case file and, where checked and requested, appropriately reference sources below):

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: KYTC.
- ☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant. KYTC
- ☐ Office concurs with data sheets/delineation report.
- ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps: .
- ☐ Corps navigable waters' study: .
- ☐ U.S. Geological Survey Hydrologic Atlas: .
- ☐ USGS NHD data.
- ☐ USGS 8 and 12 digit HUC maps.
- ☐ U.S. Geological Survey map(s). Cite scale & quad name: .
- ☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
- ☐ National wetlands inventory map(s). Cite name: .
- ☐ State/Local wetland inventory map(s): .
- ☐ FEMA/FIRM maps: .
- ☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- ☒ Photographs: ☐ Aerial (Name & Date): .
- or ☒ Other (Name & Date): KYTC #10-5005 - 01/14/2010.
- ☐ Previous determination(s). File no. and date of response letter: .
- ☐ Other information (please specify): .

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of
Regulatory Project Manager
(REQUIRED)

 2/19/2010
Signature and date of
person requesting preliminary JD
(REQUIRED, unless obtaining
the signature is impracticable)

SAMPLE

Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
1	37.158311	-83.087887	Riverine	85 linear feet	Ephemeral
2	37.158389	-83.087772	Riverine	288 linear feet	Perennial
3	37.180238	-83.093692	Riverine	789 linear feet	Intermittent

KYTC #10-5005.00

Property Owners

Othelle Hall

Mary E. Woods

Green T. & Patricia McIntyre

Green T. McIntyre Heirs

Jerry & Karen McIntyre

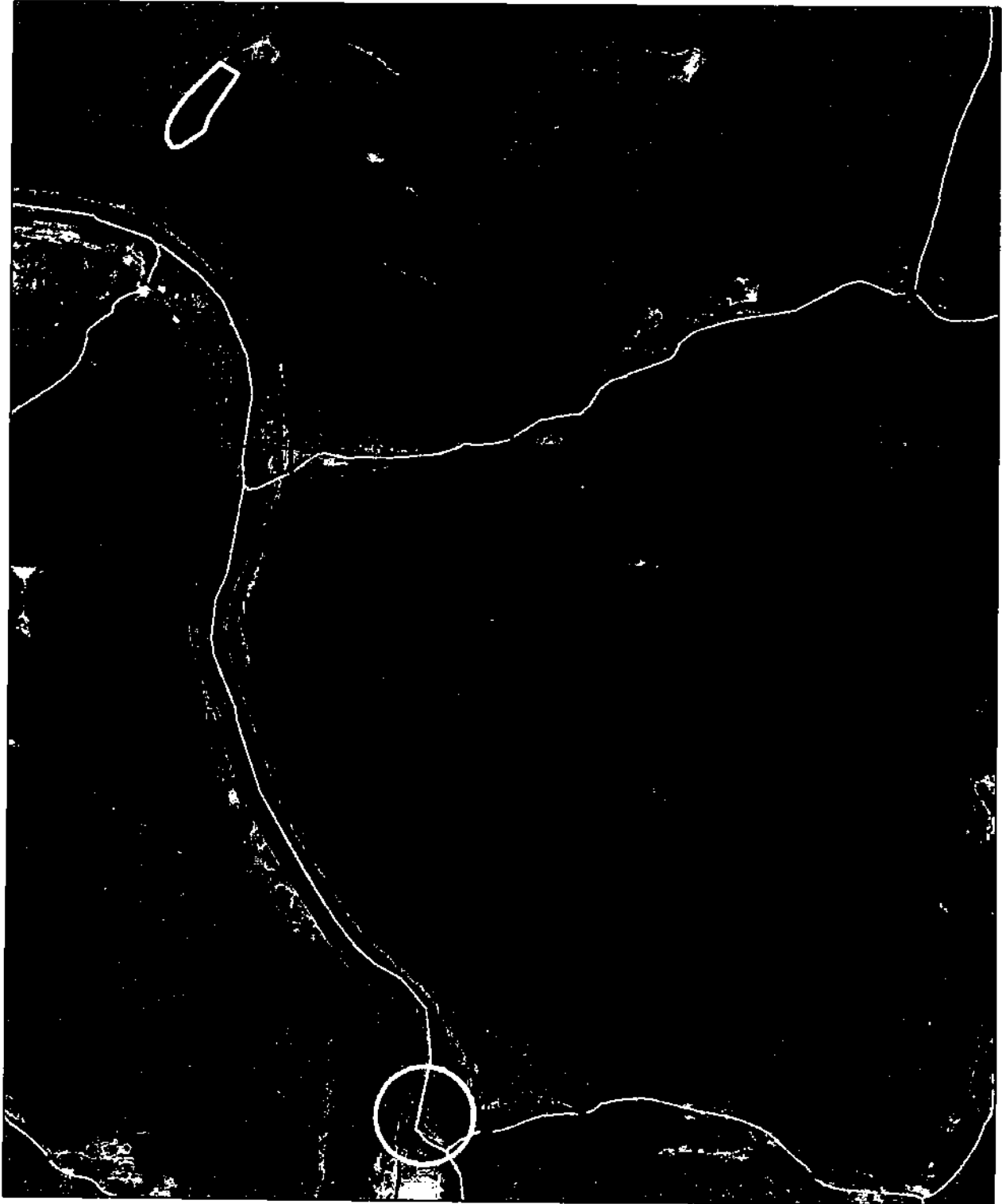
Ruby & Dennis Pagans

James & Elaine W. McIntyre

Leroy Lackey

Earl Cuddy

KY 7 Rockfall Mitigation @ Fusonia



Perry County, KY
Kentucky River Basin
KYTC Item #10-5005.00

—— 14 digit HUC Boundary

Project Location

KY 7 Rockfall Mitigation @ Fusonia



Perry County, KY
Kentucky River Basin
KYTC Item #10-5005.00

14 digit HUC Boundary



**PERRY COUNTY
KYTC #10-5005.00**

KY 7 Rockfall Mitigation at Fusonia

SUMMARY OF SECTION 404 IMPACTS

KY 7 Impacts

1. Station 111+00 (37.158311/-83.087887): Construct 45 feet of culvert pipe with 70 feet of outlet channel on an unnamed tributary (Ephemeral #2) to the North Fork Kentucky River. This replaces 30 feet of existing pipe and 85 feet of ephemeral stream. The watershed at this location is less than 50 acres. The impact to U.S. Waters at this location will be 0.006 acre.
2. Station 111+50 (37.158389/-83.087772): Stabilize 288 feet of left bank on the North Fork Kentucky River (Perennial #1). The river at this location is currently eroding and undermining the stability of KY 7 and jeopardizing the safety of motorists. The material used for the bank stabilization will be excess material ("shot rock") generated from the rockfall mitigation activity. There will be approximately 165 cubic yards of rock embankment below the ordinary high water mark. The North Fork KY River at this location is perennial in nature with a watershed of 328 square miles. The impact to U.S. Waters at this location will be less than 0.10 acre.

Excess Material Site Impacts

3. Lackey/Cuddy Excess Material Site (37.180238/-83.093692 to 37.181897/-83.091973): Construct a controlled fill impacting 789 feet of an unnamed tributary (Intermittent #1) to the North Fork Kentucky River. This portion of the stream will be filled with excavated material from the rockfall mitigation activity. The drainage will be conveyed through a constructed channel on top of the fill material. Field investigations indicate this stream is intermittent in nature with a watershed of 175 acres. The impact to U.S. Waters at this location is 0.091 acre.

KYTC # 10-5005.00

KY 7 Rockfall Mitigation @ Fusonia

Perry County, KY

Site	Stream Name	HUC #14	Lat/Long	Impact Category	Watershed	Stream Impact (ft)	Stream Impact (acres)	RBP Score	EII	In-Lieu Fee
1	Ephemeral #2	*05100201030090	37.158311/-83.087887	Culvert	<50 acres	85	<0.10	95	0.43	\$0.00
2	Perennial #1	*05100201030090	37.158389/-83.087772	Bank Stabilization	328 square miles	288	<0.10	136	0.45	\$0.00
3	Intermittent #1	*05100201030110	37.180238/-83.093692	Fill	175 acres	789	0.091	113	0.49	\$153,097.56

2/19/2010

CONVENTIONAL SIGNS

COUNTY	ITEM NO.	SHEET NO.
PERRY	10-5005.00	43

UTILITY TEST HOLE

TH

Site
#1

Site
#2

SCALE: 1"=50'

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY OF

PERRY

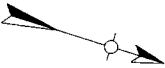
PROJECT: KYE - CORNELIUSVILLE ROAD (KY 71)
DRAWING: F004 057 0007 008-009

PLAN SHEET

STA. 103+00.00 TO STA. 113+00.00

NORTH POINT

DATE	BY	REV	NO.
PERBY	10-5005.00	15	

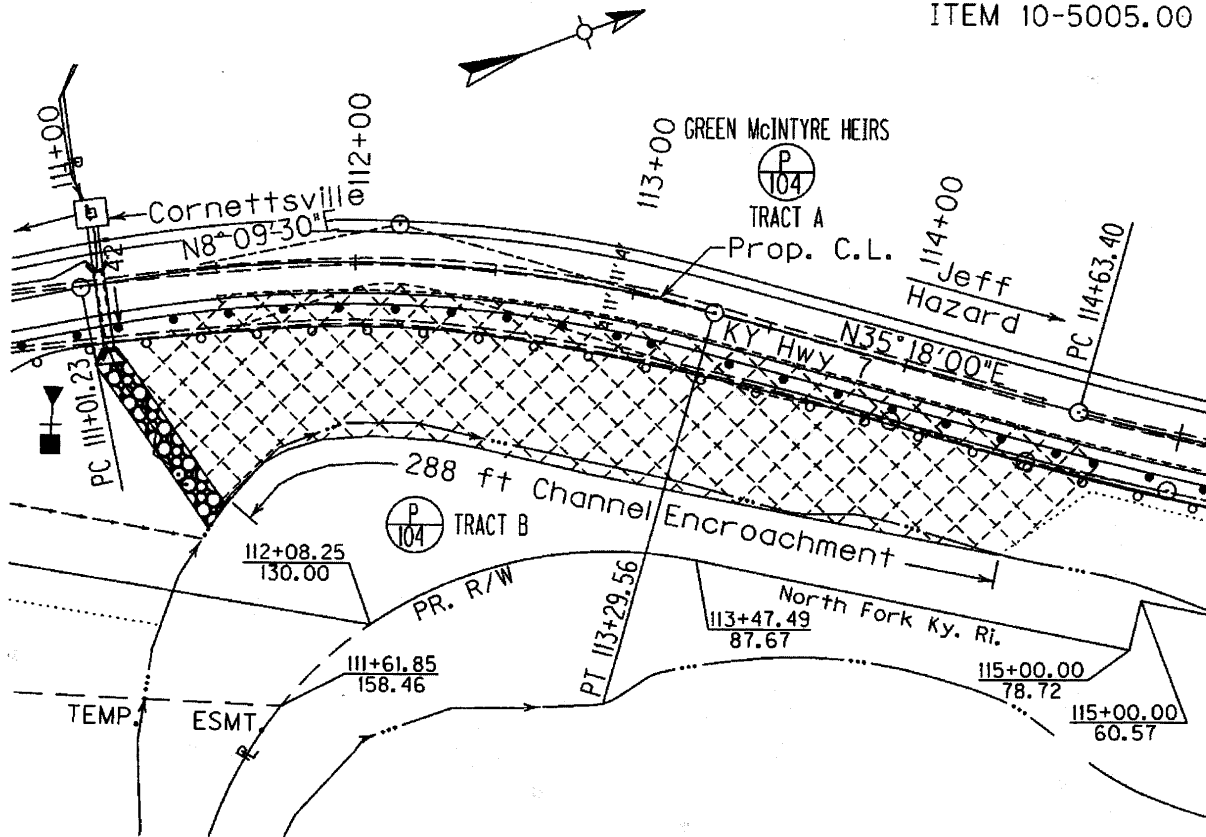


Site
#2

SCALE: 1"=50'

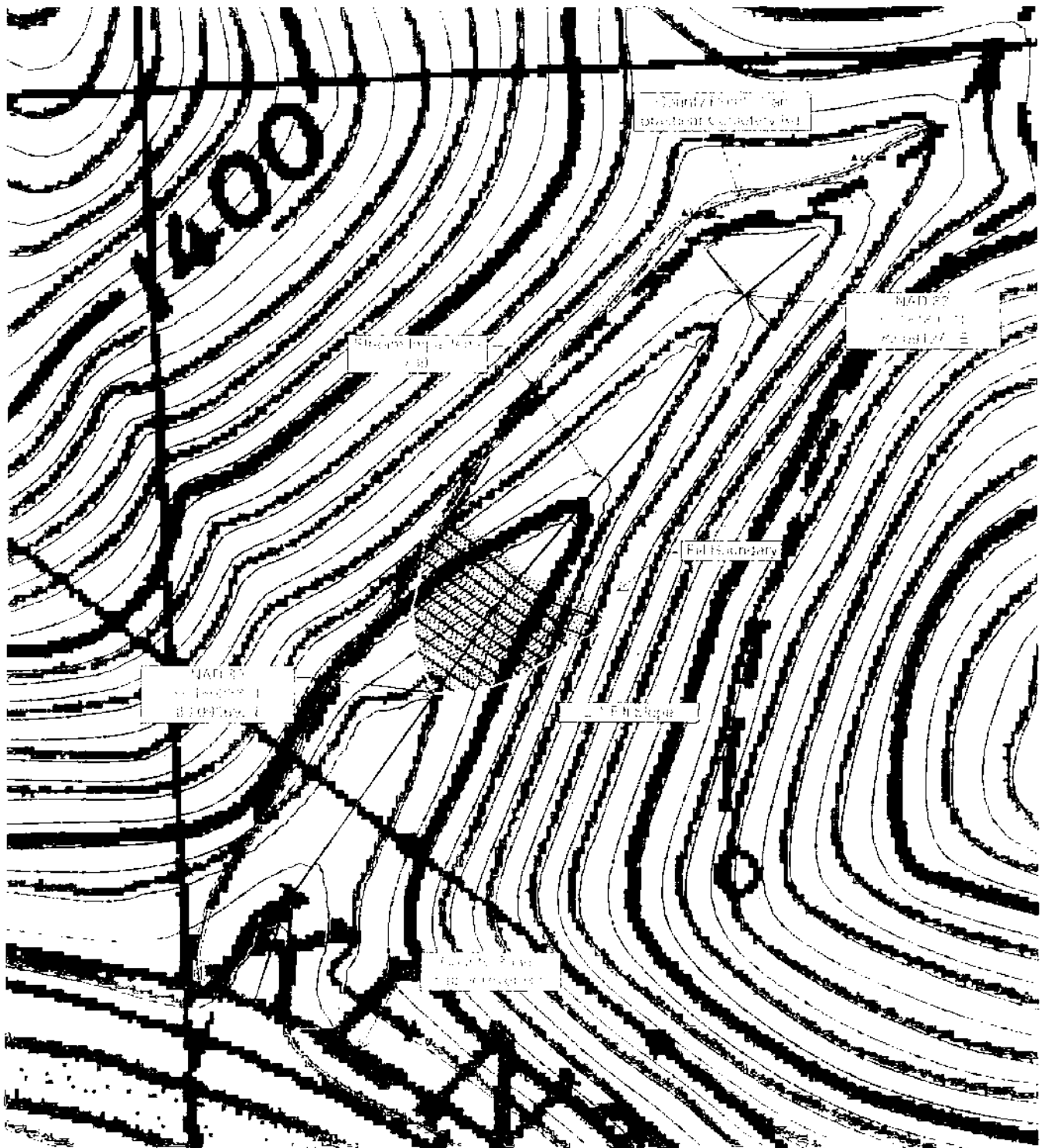
STA. 113+00.00 TO STA. 125+00.00

PERRY COUNTY
JEFF-CORNETTSTVILLE RD (KY 7)
FD52 0007 008-009
ITEM 10-5005.00



Scale 1"=50'

10-5005 - Perry County -
Fusonia Rockfall Mitigation
Topographic Map & Fill Boundary



EII Calculation for High Gradient Streams in Eastern Kentucky Coalfield (Version 2002.6)
 ** (Family Level Taxonomy - All Habitats) **

Project ID:	KYTC #10-5005.00
Stream/Reach:	Perennial #1 (North Fork KY River)
Assessment Objectives:	Section 404/401 Permit

EII	Model
NA	Ecological Integrity Index (MBI + Habitat Integrity + Conductivity)
0.45	Ecological Integrity Index (Habitat Integrity + Conductivity)

Variables Measure Units

Enter quantitative or categorical measure from Field Data Sheet in shaded cells

RBP Habitat Parameters

1. Epifaunal Substrate	16	no units
2. Embeddedness	16	no units
3. Velocity/Depth Regime	13	no units
4. Sediment Deposition	11	no units
5. Channel Flow Status	18	no units
6. Channel Alteration	17	no units
7. Freq. Of Riffles (bends)	17	no units
8. Bank stability (both combined)	10	no units
9. Veg. Protection (both combined)	9	no units
10. Riparian Width (both combined)	11	no units

Total Habitat Score **136** no units Subindex

Macroinvertebrate Data - Family Level (All Habitats)

11. Family Taxa Richness		# of taxa sampled
12. Family EPT Richness		# of EPT species sampled
13. % Ephemeroptera		% Mayflies (0-100)
14. % Chironomidae & Oligochaeta		% Midges & Worms (0-100)
15. mFBI		no units

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EII Calculation for High Gradient Streams in Eastern Kentucky Coalfield (Version 2002.6)
 "(Family Level Taxonomy - All Habitats)"

Project ID: KYTC #10-5005.00
Stream/Reach: Ephemeral #2
Assessment Objectives: Section 404/401 Permit

EII	Model
NA	Ecological Integrity Index (MBI + Habitat Integrity + Conductivity)
0.43	Ecological Integrity Index (Habitat Integrity + Conductivity)

Variables Measure Units

Enter quantitative or categorical measure from Field Data Sheet in shaded cells

RBP Habitat Parameters

1. Epifaunal Substrate	7	no units
2. Embeddedness	5	no units
3. Velocity/Depth Regime	6	no units
4. Sediment Deposition	7	no units
5. Channel Flow Status	1	no units
6. Channel Alteration	17	no units
7. Freq. Of Riffles (bends)	16	no units
8. Bank stability (both combined)	2	no units
9. Veg. Protection (both combined)	16	no units
10. Riparian Width (both combined)	18	no units

Total Habitat Score 95 no units Subindex

Macroinvertebrate Data - Family Level (All Habitats)

11. Family Taxa Richness		# of taxa sampled
12. Family EPT Richness		# of EPT species sampled
13. % Ephemeroptera		% Mayflies (0-100)
14. % Chironomidae & Oligochaeta		% Midges & Worms (0-100)
15. mFBI		no units

EII Calculation for High Gradient Streams in Eastern Kentucky Coalfield (Version 2002.6)
 "(Family Level Taxonomy - All Habitats)"

Project ID: KYTC #10-5005.00
Stream/Reach: Intermittent #1 (Lackey/Cuddy Excess Material Site)
Assessment Objectives: Section 404/401 Permit

EII	Model
NA	Ecological Integrity Index (MBI + Habitat Integrity + Conductivity)
0.49	Ecological Integrity Index (Habitat Integrity + Conductivity)

Variables Measure Units

>>>>>>

Enter quantitative or categorical measure from Field Data Sheet in shaded cells

RBP Habitat Parameters

1. Epifaunal Substrate	16	no units
2. Embeddedness	7	no units
3. Velocity/Depth Regime	10	no units
4. Sediment Deposition	5	no units
5. Channel Flow Status	8	no units
6. Channel Alteration	18	no units
7. Freq. Of Riffles (bends)	16	no units
8. Bank stability (both combined)	4	no units
9. Veg. Protection (both combined)	14	no units
10. Riparian Width (both combined)	15	no units

Total Habitat Score 113 no units

Subindex

Macroinvertebrate Data - Family Level (All Habitats)

11. Family Taxa Richness		# of taxa sampled
12. Family EPT Richness		# of EPT species sampled
13. % Ephemeroptera		% Mayflies (0-100)
14. % Chironomidae & Oligochaeta		% Midges & Worms (0-100)
15. mFBI		no units

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KYTC #10-5005

Perennial #1 – North Fork KY River - Bank Stabilization



KYTC #10-5005

Ephemeral #2 – unnamed trib to North Fork KY River



KYTC #10-5005

Intermittent #1 - Lackey/Cuddy Excess Material Site

